

REMARKS

This Request for Reconsideration is offered in response to the Office Action of October 18, 2005.

The Office Action rejected Claims 1-14 under 35 U.S.C. §102(b) as being anticipated by Mochizuki reference (U.S. Patent No. 6,059,405). The Office Action also rejected Claims 2-8 under 35 U.S.C. §103(a) as being obvious over the Mochizuki reference in view of Shimizu reference (U.S. Publication No. 2004/0134801). Additionally, Claim 9-14 were rejected as unpatentable under 35 U.S.C. §103(a) as being unpatentable over the Mochizuki reference in view of the Shimizu reference and further in view of Saito reference (U.S. Patent No. 4,970,533).

35 U.S.C. §102(b) Rejection of Claims 1-14

Claim 1 of the present application recites a method of introducing ink in an ink-jet recording apparatus which has an ink-jet printing head. The method comprises: a first ink-introducing step of initially introducing a first ink into the printing head when the printing head is initially used; and a second ink-introducing step of subsequently introducing a second ink into the printing head after the first ink-introducing step. The deaeration degree of the first ink is made higher than that of the second ink.

As explained in paragraph [0006] of the specification, the ink-ejecting performance of the ink-jet recording apparatus is largely influenced by the degree of deaeration of ink where the ink is initially introduced into the ink-jet printing head of the apparatus when the printing head is initially used. Therefore, as long as the ink having a relatively high degree of deaeration is initially introduced into the printing head upon initial use of the printing head, the ink-ejecting performance is not largely influenced by the degree of deaeration of ink which is to be subsequently introduced even if the degree of deaeration of the ink is lower than that of the

initially introduced ink. The present invention was made based on this finding.

According to the method recited in claim 1, because the first ink having a higher degree of deaeration is introduced when the printing head is initially used, the ink can be introduced without a risk of being bubbled in the printing head. Further, the second ink which is subsequently introduced into the printing head can be introduced with high stability in spite of its degree of deaeration being lower than that of the first ink, resulting in good or stable ink-ejecting performance. Unlike a conventional case wherein ink having a relatively high deaeration degree is always used, the present method is effective to reduce the cost of ink to be used and assures a stable ink-ejecting performance.

The cited Mochizuki reference discloses an ink-jet recording apparatus including recording heads (4,5), main ink tanks (16-19), deaerators (20-23) and relay tanks (28-31). In the disclosed apparatus, the air in the ink supplied from a corresponding one of the ink tanks is separated by a corresponding deaerator, and the deaerated ink is supplied to a corresponding relay tank and finally to a corresponding recording head. In this respect, the reference does not disclose that the degree of deaeration of the ink is changed.

Further, the reference does not even remotely disclose, teach or suggest the above-indicated feature recited in present claim 1. That is, the reference does not disclose, teach or suggest that ink initially introduced into the recording head upon initial use has a relatively high deaeration degree while ink that has a lower deaeration degree than the initially introduced ink is subsequently introduced after the initial introduction of the ink.

For the reasons described above, Applicant believes that the invention presently claimed in claim 1 is novel over the Mochizuki reference. Withdrawal of the rejection is respectfully requested.

35 U.S.C. § 103(a) Rejection of Claims 2-8

Claims 2-8 are rejected under 35 U.S.C. § 103(a) as being obvious over Mochizuki reference in view of the Shimizu reference.

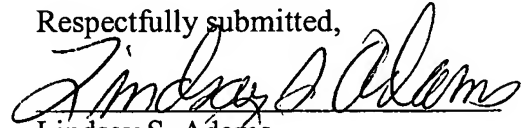
As noted by the Examiner, the Shimizu reference has a common assignee. Applicant submits a copy of the patent assignment recordation details of the Shimizu reference as Exhibit 1. A copy of the assignment recordation for the present application is also attached as Exhibit 2. In view of the common ownership of the Shimizu reference, the rejection of claims 2-8 should be withdrawn.

35 U.S.C. § 103(a) Rejection of Claims 9-14

Claims 9-14 are rejected 35 U.S.C. § 103(a) as being unpatentable over Mochizuki reference in view of Shimizu reference, and further in view of Saito reference. Similarly, Applicant respectfully points out that the Shimizu reference is commonly owned and does not qualify as prior art against the present application. Withdrawal of the rejection is respectfully requested.

The Applicants respectfully request for an early examination and allowance. The applicants do not believe that any fees are due other than the fee for the request for the two extension of time submitted with this response. However, if any additional fees are due, please charge such sums to our Deposit Account 50-1145.

Respectfully submitted,

A handwritten signature in cursive script, appearing to read "Lindsay S. Adams", written over a horizontal line.

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